

Data Sheet

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Product Name:KenpaulloneCat. No.:PC-42965CAS No.:142273-20-9Molecular Formula:C16H11BrN2OMolecular Weight:327.1754

Target : Cyclin-dependent Kinase (CDK)

Solubility : DMSO: ≥ 35 mg/mL

Biological Activity

Kenpaullone~(9-Bromopaullone, NSC-664704)~is~a~potent~inhibitor~of~CDK1/cyclin~B~with~IC50~of~0.4~uM,~also~inhibited~CDK2/cyclin~A~(IC50=0.68~uM),~CDK2/cyclin~E~(IC50-7.5~uM)~and~CDK5/p25~(IC50=0.85~uM).

Kenpaullone shows less effect on other kinases, only c-Src, CK2, ERK1/2 (IC50=15-20 uM) with IC50s less than 30 uM. Kenpaullone displays delayed cell cycle progression in treated cells; also is a potent inhibitor of GSK-3 β (IC50=23 nM), activates Nanog expression in mouse fibroblasts transduced with a subset of reprogramming factors lacking Klf4, can replace Klf4 in the reprogramming of primary and secondary fibroblasts and NPCs.

References

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Schultz C, et al. J Med Chem. 1999 Jul 29;42(15):2909-19.

Bain J, et al. Biochem J. 2003 Apr 1;371(Pt 1):199-204.

Lyssiotis CA, et al. Proc Natl Acad Sci U S A. 2009 Jun 2;106(22):8912-7.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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